A NEW SPECIES AND SUBSPECIES OF AMBRYSUS FROM GUATEMALA

(Hemiptera: Naucoridae)

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The following descriptions are based upon material submitted for examination by Dr. H. B. Hungerford, and are offered at this time so they will be available for a forthcoming report on Guatemalan aquatic Hemiptera.

Ambrysus hungerfordi spicatus La Rivers, subspecies novum

General appearance: small, rotund for the genus; size 7–8 mm. long, 5–6 mm. wide. Dorsum bicolored, lighter anteriorly, darker posteriorly, glistening but not polished. Venter strongly contrastingly colored with blackish-browns and yellows.

Head: Ground-color light yellow, shiny, impunctate or essentially so; two prominent, median, longitudinal brown lines beginning in anterior quarter of head and becoming increasingly wide posteriorly, fusing there with a conspicuous bilobed brownish spot. Front widely but smoothly protuberant between eyes. Viewed from behind, eyes insignificantly protuberant above head surface. Head shallowly set into anterior pronotal border.

Pronotum: Shiny, but not polished, roughly and shallowly punctate; ground-color light yellowish-brown, with varied darker mottling: edges smooth, unserrate, conspicuously set with long, but not dense, yellowish flying hairs; per cent of lateral pronotal curvature is 15% (85::13); postero-lateral angles usually present, but not conspicuous, and approximately at widest point of pronotum.

Hemelytra: Basically dark, weakly variegate blackish and brownish, lighter along embolium; densely, shallowly and roughly punctate, each puncture seating a white spot; embolium tending to be somewhat short and wide for the genus (length is 36 per cent of width, 30:83), but definitely not inflated, light yellow on anterior two-thirds, dark on posterior one-third, edged with sparse, yellow hairs. Hemelytra moderately exposing lateral connexival edges, postero-lateral connexival angles moderately spined; connexival edges densely, yellowishly pilose; hemelytra just attaining abdominal tip.

Venter: Yellowish-brown, abdomen densely furred with yellowish, short, hydrofuge pelt; connexival postero-lateral angles sharply, rather finely spinose, the spination quite evident on all segments except I; all connexival edges except I-II are strongly and markedly dentate or serrate, and the posterior half of II may show incipient serration. Female subgenital plate smoothly and moderately concave at the tip, lateral angles blunt, rounded. Male genital process short, rather spinose, straight, leaning outwardly. Female abdominal segment V with greatly enlarged secondary connexival spinose angle, which is the chief distinguishing feature of the subspecies.

Legs: Prolegs—coxa and trochanter well developed, femora greatly incrassate; smooth, shiny, yellow; combined tibia-tarsus, when closed, attaining

adjacent (proximal) end of femur. Mesolegs—smooth, shiny, yellow, narrow; femur flattened, tibia square, reddish spination developed along the "corners"; distal end ventrally with one complete, prominent, transverse row of spines set in a solid row across extreme tip instead of the usual two rows (in this case, the second row is reduced to 2–3 spines on each side, leaving the midsection bare); tarsus obscurely 3-segmented, first segment short, inconspicuous, segments II-III long, narrow, terminating in two weakly curved c'aws. Metalegs—larger replicas of the mesolegs.

Type locality:—Guatemala, Rio de Paz of San Diego, Pan-American Highway, 15 (iv) 47, R. R. Miller (Univ. Kansas collection).

Location of types:—Holotype, male, and allotype in collection of the Snow Museum of the University of Kansas at Lawrence. One paratype each in the collections of the U. S. National Museum and the University of Michigan.

Material examined:—Guatemala, Cuilapa, 10 km. SW of, 21(iv)46, R. R. Miller, paratype (USNM); Mexico, Chiapas (Ixtapa), 27(iv)41, I. J. Cantrall, paratype (UM).

With a desire to keep the key to Mexican ambrysi (in press) up to date, the following couplet is offered as a means of including A. h. spicatus in that key:

The typical subspecies, A. h. hungerfordi Usinger, 1946, is known from northern to southern Mexico; further collecting may possibly extend its range into extreme southwestern United States, and A.h. spicatus appears to be the southernmost known segment of the species. The pudicus group of Ambrysus, to which A. hungerfordi belongs, is a distinctive, variable section of the genus obviously Mexican in origin. Although A. pudicus has been previously reported in error from the United States, a recently discovered bona fide member of the group extends its range northward into southern Nevada (in press), which very probably constitutes the true northern limits of the group.

Ambrysus dyticus La Rivers, species novum

General appearance: a mottled species of medium size for the genus; size 9.5–11.0 mm. long, 6.75–7.5 mm. wide. Dorsum, while variegated brown and yellow, is lighter anteriorly, darker posteriorly; shiny but slightly shagreened. Venter rich yellow except along lighter lateral borders, which darken a bit anteriorly.

Head: Ground-color whitish-yellow to deep yellow with a variable development of darker brownish spotting and streaking, taking the form of two median series of dots, developing into two basal spots caudally. Surface shiny, smooth, minutely punctulate. When oriented so that dorsal plane is perpendicular to line-of-vision (i.e., the greatest amount of dorsum exposed to view) front of head is seen to be slightly and truncately protuberant before eyes. Eyes greyish, outer and inner margins only slightly curved, posterior margin strongly curved: eyes essentially flush with the head surface. Head broadly and rather shallowly seated in anterior pronotal border. Labrum same color as head front.

Pronotum: Shiny, smooth, minutely punctulate, incipient transverse ragulosities developing centrally behind region of deepest head penetration. Ground-color whitish-yellow, with a variable development of brownish mottling and dotting on disc. Broad, whitish, posterior pronotal border conspicuously separated by a transverse line (interrupted in the middle) from the varicolored disc. Lateral edges smooth, non-serrate, without any pilosity; when head is firmly seated into anterior pronotal border, outer edge of pronotum and eye form essentially a smooth contour, i.e., the emargination caused by the juncture being non-existent or insignificant. Per cent of pronotal lateral curvature is 15% (40::6). Pestero-lateral angles quasidistinct, well rounded.

Hemelytra: The most contrastingly mottled portion of the dorsum, heavy brown-and-yellow variegation, the brown areas conspicuously white-punctate: when best developed, the pattern of light areas consists of a large, light area on embolium, a generally slightly darker, irregular spot at postero-internal embolar angle, a light border along anterior two-thirds of corium-membrane juncture, wider posteriorly and giving rise to a forward-projecting branch medially; a wide, vague light area adjacent to outer hemelytral border; clavus light along sutures, and medially. Surface shiny but not polished, shagreened. Embolium moderately stout for the genus (width is 33 per cent of length, 15:45), smooth, non-pilose laterally; anterior two-thirds to three-fourths yellowish, posterior part dark brown. Hemelytra strongly exposing lateral connexival margins, which are yellowish, with dark spots at connexival junctures. Postero-lateral connexival angles weak-angulate, non-spinose. Hemelytra just, or not quite, attaining abdominal tip.

Venter: Generally very light yellow, covered with pale hydrofuge pelt; embolar venter paler externally; postero-lateral connexival angles variably developed, anteriorly to posteriorly, nearly right-angled on segments I-II, gradually developing a somewhat caudally-slanted aspect to the angles on

segments III-V, each angle, from I to V, protruding progressively more laterally; margins of segments I-II absolutely smooth, of segments III-V minutely irregular. Female subgenital plate quadrisinuate across the broad tip, this sinuosity varying from a nearly level line to one in which the lateral sinuosities become weak-angulate and may extend caudally farther than the median

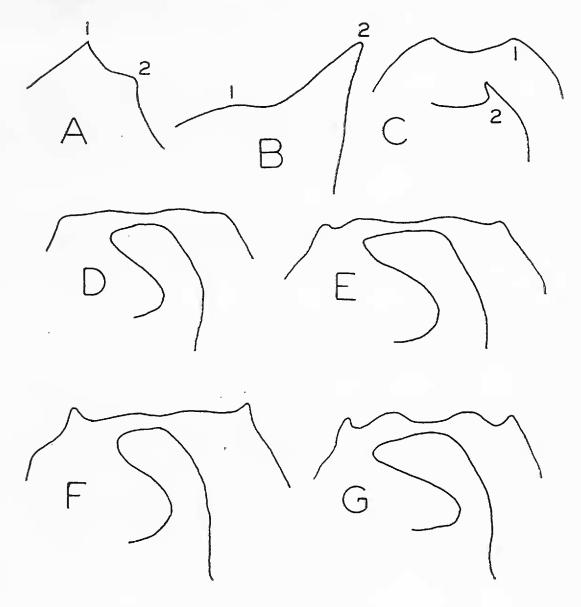


Fig. A. Region of postero-lateral connexival angle on left side of abdominal sternite V, of *Ambrysus hungerfordi hungerfordi* Usinger, ventral view. (1) Primary postero-lateral connexival angle. (2) Secondary postero-lateral connexival angle.

Fig. B. Region of postero-lateral connexival angle on left side of abdominal sternite V. of *Ambrysus hungerfordi spicatus* n. subsp., ventral view. (1) Primary postero-lateral connexival angle. (2) Secondary postero-lateral connexival angle.

Fig. C. Accessory genitalic structures of Ambrysus hungerfordi spicatus: (1) outline of tip of female subgenital plate; (2) outline of male genital process.

Figs. D-G. Showing four variations of the female subgenital plate and the male genital process of *Ambrysus dyticus* n. sp.

sinuosities, which are always low and rounded. Male genital process similarly variable in shape, well developed, from club- to boot-shaped (see illustration).

Legs: Prolegs—whitish yellow, smooth, shiny, coxa and trochanter well developed, femur typically incrassate, combined tibia-tarsus narrow, when closed against femur just attaining adjacent (proximal) end of femur. Tarsus one segmented. Mesolegs—whitish-yellow, smooth, shiny, femur flattened, tibia somewhat square, each corner bearing variable red-spination; tibia with distal end ventrally with two prominent, transverse rows of spines, the terminal row set solidly across tibial apex, the secondary or proximal row incomplete on outer or anterior edge, slightly more than half of the length of terminal row. Tarsus smooth, long, narrow, same color as tibia, obscurely three-segmented, the first segment inconspicuous, the others long, terminating in two slender, moderately curved claws. Metalegs—larger replicas of the mesolegs.

Type locality: Guatemala, Lake Ayerza, 11(v)47, R. R. Miller (UK).

Location of types: Holotype male, allotype and several paratypes in the collection of the Snow Museum, University of Kansas, Lawrence; one paratype in the collection of the University of Michigan.

Material examined: Guatemala, Cuilapa, 10 km. SW of, 21(iv)46, R. R. Miller, paratype (UM).

Ambrysus dyticus seems to be a southern development of the signoreti group of the genus, most closely related in accessory genitalic structures to the recently described Ambrysus occidentalis La Rivers, 1951, from extreme southwestern United States, differing from the latter chiefly in smaller size and much reduced connexival spination. In actuality, the two species are probably not particularly close within the group, since, despite the gross similarity of female subgenital plates and male genital processes, there is some difference in body proportions and convexity.

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